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January 3, 2000

To: Commissioner of Patents and Trademarks
Washington, D.C. 20231

Fr: George O. Saile, Reg. No. 19,572
20 McIntosh Drive
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Subject:

Serial No. 09/443,447 11/22/99

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A GMR CONFIGURATION WITH ENHANCED SPIN FILTERING

Grp. Art Unit: 1773

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56. Copies of each document is included herewith.

U.S. Patent 5,780,176 to Iwasaki et al., Magneto-resistance Effect Element", discloses a MR element with a exchange coupling film wherein the exchange coupling film is made of a FM material that improves the lattice matching.

U.S. Patent 5,843,589 to Hoshiya et al., "Magnetic Layered Material, and Magnetic Sensor and Magnetic Storage/Read System Based Thereon", discloses a MR having a Ta buffer layer.

U.S. Patent 5,766,743 to Fujikata et al., "Magneto-resistance Effect Film, a Method of Manufacturing the Same, and Magnetoresistance Effect Device", discloses a MR with a anti-FM layer on a metal oxide (NiO) layer.

U.S. Patent 5,668,688 to Dykes et al., "Current Perpendicular-to-the-Plane Spin Valve Type Magnetoresistive Transducer", discloses a SV with a TA layer under the Free layer.

Sincerely,

Stephen B. Ackerman,
Reg. No. 37661